



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE HEALTH OF SCHOOL GIRLS

NELLIE COMINS WHITAKER
Salem, Mass.

Our high schools are primarily fitting schools; upon that we are all agreed. When we ask for what they should fit their pupils there may be a difference of opinion. We should be glad to have every school prepare each of its pupils to take in the world a place of as great satisfaction to himself and usefulness to others as his natural abilities would permit. Since a school for each child's peculiar needs is impracticable we plan our course for the average child—though we know that the average child does not exist. Into a high-school curriculum the committee and the supervisors and the teachers put in the groups that they call courses the subjects that they think will best fit different groups of pupils for the requirements that the future is likely to make of them. But these subjects are not all the things that are learned in school, perhaps not even the most important things. The boy or girl who is fit ought to be cleanly in body as well as in mind, to be physically vigorous, and honest. Literature and sciences help toward these things unquestionably; we expect additional training from the teacher's example and personality. Teachers recognize that this expectation is legitimate and try to appear to their pupils attractive and well-mannered and wise.

There are, then, some matters other than those subjects printed in the programme for which teachers feel responsible. A teacher educated by looking for some years into the faces of boys and girls expecting much of her has come to know that there is no limit to her responsibility. "I consider," says one high-school instructor, "that I am employed by the city of New York to teach these girls cleanliness, manners, and morals. If I have any time left after that, then I try to teach them mathematics."

There was a time in American history when parents gave instruction in manners and morals, or sent their children to private schools for it. We see that conditions are entirely different now. A large proportion of the pupils in the city schools, even in the high schools, come from a class raising themselves industrially and socially far above their parents. They are coming to standards of living of which their parents have had no experience. What the public school does not give them of sweetness and light they may not have. When they leave school education ends for them, and they go to work in surroundings which at least are not uplifting. And more than this is true. Through the children the parents get from the schools the strongest influence toward higher standards for themselves.

Evidently the functions of a fitting school grow larger as we consider them! But the briefest thought convinces us that no boy nor girl can be considered fit unless he or she has robust health. Are our high schools promoting this? Do our pupils have as good health at the end of their course as they had at the beginning? The boys seem to come out of the high school none the worse physically. But as the teacher watches her girls she is dismayed to see how many of them appear to lose in health steadily during the four years and to finish their course—or to drop out of it—with impaired health. Inevitably the teacher asks, "Is there anything that I can do about this?"

This is the question that I want to discuss: Is there anything that we as teachers can do to make our girls physically more fit? Some boys fail in health in school; many girls do not. But too large a proportion of high-school girls are stooping, flat-chested, anaemic, nervous to the verge of hysteria. Their mothers tell us that they are without appetite, irritable, and suffering, and that "their school is too hard for them." The mother believes that the school is entirely responsible for her daughter's condition; the teacher thinks the condition is mainly due to habits at home. Talk with the girl indicates, talk with the mother makes evident, that the daughter eats, sleeps, dresses, studies, just as she herself thinks best; and this unrestraint exists whether the

daughter comes from the tenements or from a luxurious home.

In many cases a girl's teacher has more effective influence over her than has anyone else. How can she use it for the girl's physical betterment? First of all she has to discover so far as she can, the reasons for the girl's frail health. Does the responsibility belong to the school course, that course upon which the girl's brother thrives? Is the girl mentally unequal to the same demands that the boy meets without difficulty?

Thus far in her school course she has not appeared less able. Up to the seventh or eighth school year the girls usually take higher rank than the boys—are more likely to "skip a grade." But about the eighth year in school a decided difference appears. Teachers in the grammar grades see the evidences of physical and nervous upset, understand conditions more or less fully, and try as far as they may to help the young woman through the trying months. At this time perhaps more than at any other in her life a girl needs the intelligent care of her mother. For the girl who has not such direction in her home it will probably come nowhere unless in the public school. How can it be given her there?

Her teacher ought to know definitely and in particular what physicians and educators and biologists have come to believe about the adolescent girl. Doctor Clarke's *Sex in Education* was, I think, the first published study of the relation between woman's physical constitution and her manner of education. The book aroused a storm of protest when it was published, but it opened a way along which many have followed, and it remains a most suggestive book for any teachers of girls. Doctor Clarke is confident that girls in the grammar and high schools appear different from boys because they are girls, "not undeveloped man but diverse;" because they are ruled by a law of being to which their brothers are not subject.

The public-school programme does not—in many respects cannot—take into consideration this periodic law which rules the life of the woman. For this reason the course of study upon which the boy thrives appears to injure the girl. The difference

between them is not mental but physical. Her need is not for a feminine course of study but for opportunity to take the general course in her own way.

A girl's "breaking down from over study" usually comes during her later high-school years or after graduation. But the cause lies earlier, during the last of the grammar-school course; then comes the time of puberty for the girl; then she should be maturing that organism which in the eyes of Mother Nature is the most important element of her being; in fact, the reason for her being at all. To perfect this organism the woman needs all her vital and nervous force. If by mental or physical overwork her sexual perfecting is hindered she is physically stunted for life; she may become a scholar or an athlete but she will have no later chance to become a perfect woman. Just as the boy overworked in the mine before he gets his growth will always be an undersized man to whom no subsequent easy conditions can give his proper stature, so the child of fourteen may lessen the health and usefulness of her whole life. The average school girl in this country does not overwork her muscles but often she is kept under continual nervous strain to meet the requirements of getting into the high school or of keeping her position there. The brain takes all the nourishment her blood can furnish; the result is irregularity of function, suffering, ill-health, nervous collapse.

These ideas are not unsupported theories. It seems impossible that a teacher can read the opinions of authorities in gynecology, biology, and education and see how, coming by entirely different routes, they have arrived at identical conclusions, without being impressed that they have discovered a truth which is literally vital.

The best discussion of the subject which I have found is the president's address of Doctor George J. Englemann given before the American Gynecological Society. Would that it might be read in full by all teachers of girls! In it he says:

Adolescence is the most important period of a woman's life, the period during which the foundations of future health are laid. . . . It is in this period of school, the beginning of social life, the period of learning in trades, that the nervous energies of the female are most fully engaged and her

activity is concentrated on the brain, to the detriment of other functions, above all the developing sexual function, the central and most important and at that time the most easily disturbed. . . . The functional health of the American girl, the coming mother of American men, is far from what it should be by right of inheritance and surroundings. This fact we must recognize, we must face; upon physicians *and educators* devolves the duty of study and correction of the evil.

Almost invariably the percentage of suffering is greater in the more exacting work or study of the advanced classes than it was before in the greater years of freedom; yet we find that from 65 to 70 per cent. enter the higher institutions of learning—normal school and college—and business, with menstrual suffering of some kind and as a rule this suffering increases in the mental and physical occupations here considered, with some few exceptions and these are educational institutions where marked attention is given to physical training.

In school where the opportunity is given of observing the healthy in numbers certain phases of physiological import have been investigated, such as growth, height, weight, muscle-force, eyesight, hearing; but this one all-important function which is more intimately linked with the mental, moral, and physical well-being of the girl has been a *noli me tangere*—and in a measure rightly so; yet it is a course based upon a false modesty, a modesty ill-timed and detrimental, which opposes proper scientific investigation so essential as a foundation for the guidance of educational efforts, for the correction of errors already committed.

I quote at such length from Doctor Englemann on account of his reputation as a gynecologist and because the monograph is rather difficult to obtain.

President G. Stanley Hall, indefatigable student of educational problems, has arrived through his study of the customs of primitive and savage races, of the investigations of physicians in many lands, and of the observations of teachers, at conclusions identical with Doctor Englemann's. In *Adolescence* he devotes a chapter to "Periodicity," in which he says that lack of attention at the time of puberty,

often before the danger is realized, condemns girls to a life of semi-invalidism that might have been avoided by a little more care and wisdom at the critical time when these functions were being first established and regulated.

In the dim depths of her soul the girl vaguely feels how paramount this function is, especially in its initial stage of incipiency, at least for her good looks, spirits, and ease of daily duties, but at the same time she infers from the observation of others and perhaps from the very paucity of information

given her that the less concession made to this instinctive sense of its importance or to her feelings or her sense of waning vigor, the better. The change in her own psychic state naturally suggests that the periods are all-conditioning, but the sentiment of her environment is to ignore them as unimportant, if not shameful.

Some plain and simple statement of the significance and dangers of these periods should be an essential part of the educational equipment of every girl on or before reaching this age. . . . Ophthalmology has vastly widened its scope in recent years by entering the school and doing a great preventive work for the young. Gynecology should profit by this example.

Professor John Tyler's recent book, *Growth and Education*, discusses the different epochs of development in school children; he too bears testimony that

until the menses are thoroughly established and occur with regularity the girl should have almost complete rest whenever they occur. . . . The critical period in a girl's life is evidently between the ages of ten and fifteen, earlier than most of us think. The time to begin to take precautions is several years earlier, at seven or eight. Most of our care and thought goes to "locking the barn door after the horse has been stolen."

From the study of all the authorities available a teacher must conclude that woman's life for about thirty years is made up of a succession of physical waves. Why these waves are of just the same length as the phases of the moon we are not certain; nature has many rhythms which are inexplicable but sure. During each wave of woman-life there is a period of lessened vitality, of increased nervous sensitiveness and depression when the woman should be free from demands on muscles and nerves. This is true in some degree so long as she is ruled by the periodic law, but it is especially important at the period of puberty when regularity of function can be established.

Without question it belongs to the mother to see that the girl goes through these months rightly. But if for any reason the mother does not meet the demand, what can the teacher do? And first, when can she do anything? She is fortunate if she can find time for individual talks with her pupils. The observant teacher sees when a girl is ill and suffering, and sends her home, probably protesting and in tears. When she returns there is an opportunity to explain to her what her pains of mind and

body mean. But first of all there should be every year in a high school talks on hygiene for the girls of the entering class. We can always find time some way for the things which we care most to do. Much may be accomplished in three or four recitation periods during the girl's first high-school year; oftentimes this will be all that a girl gets, during the whole four or five years, of any instruction in the care of her health. Usually the girls can have this instruction while the boys are at drill or manual training. In the fortunate schools where the girls have gymnastic work by themselves opportunity is provided in that way.

When the suitable time has come, *how* shall the teacher approach the delicate subject? In the first place she can remind her pupils how tremendously worth while it is to be well. The present vogue of the athletic girl helps here. An ideal way of introducing the matter of sex differentiation is through plant and animal life. A high-school principal planning for these talks will think first of his teacher of botany and biology as the natural one to prepare such a course on account of the obvious analogies between flowers and the "human plant." Discussion of the processes of reproduction, except so far as they come in all study of plant life, is unadvisable but something of the meaning of maternity should be made clear. Suggestive analogies to a woman's development may be found in insect life. Professor Tyler often compares this crisis to the metamorphosis of a butterfly. There is also to my mind something that suggests the growth of a queen bee. It is the belief of many students of the life of bees that the queen is a female that develops normally, while the worker is stunted in her sex organs by limited food and cell accommodations at her time of growth. Any school girl sees that the estate of a queen is preferable to that of a slave.

These talks for the girls do not necessarily come from a teacher of natural science if there is in the school another teacher more devoted to the welfare of the girls, more resourceful in directing them. A teacher in any department can bring the subject before the young women in such a way that it will receive the respect that is its due; will be treated with its proper reservations, yet discussed by both sides so fully that the pupils

may know the importance of taking care of themselves and how to do it. The main hope is in enlisting the girl herself. In a great proportion of cases the girl does in all things as she chooses. If she does not take care because she is convinced that it is worth while, the chances are that she will not take care at all. Somehow she should be led to believe that if she over-studies at the time when the menses ought to appear—and we are told now that the time in the month for the greatest care is two days before that appearance—or overworks physically, or takes violent muscular exercise, such as tennis or dancing, or is chilled, or sits in wet clothing, she runs a great risk of lessening permanently her physical fitness for the enjoyment of life. She must decide to take two days out of school every month and make the most of the preceding Saturday and Sunday. A teacher can very easily adjust matters so that a girl can keep in good standing in her class nevertheless. How many girls do the last year of college preparation suffering so severely for at least two days every month that the work for those two days really amounts to nothing!

In cases where the girl for some reason is not maturing rightly it might be better for her to leave school entirely for the rest of the school year provided that her vacation be directed so that it accomplish the object for which it is given. It often occurs, however, that she goes home to be coddled as “delicate,” to be allowed to spend a good part of the morning in bed, to eat anything her morbid appetite craves, to waste hours over the register reading unwholesome novels, to spend her evenings at dances or worse than useless entertainments in badly ventilated rooms, since “she is so blue she needs something to cheer her up.” She would be much better off having school under a judicious teacher, regular hours, healthy occupation for her mind, plenty of outdoor air, and sleep. The value of staying out of school for a girl depends entirely on the mother with whom she stays, and a teacher must take into consideration this fact before she can conscientiously recommend a vacation. Possibly a physician ought to look into that element of the case also.

Even after a year or two of lack of care I have known a girl

to be restored to health again by faithful observance of her days of rest, but it is not safe to depend too much on the possibility of recuperation.

No wise teacher will let pass the opportunity afforded by these talks without giving further suggestions as to the habits of the girls. She will present the value of proper, sufficient, regular meals; of the necessity of regular and complete elimination of waste from the system; of sufficient and comfortable clothing; of plenty of pure air, indoors and out, night and day; of the harm done by unsuitable amusements; of the proper manner of study so that every hour spent with books may accomplish its maximum result; and of proper care of the eyes.

While it may be that most of the girls will disregard most of the suggestions, a little benefit will come to some of them, a widening circle of benefit in coming years, it may be.

As more intimate relations develop from these talks together, as more intimate relations will develop if they are given by the right teacher in the right way, it becomes possible to discuss the influence of foolish books on the mind, even to speak of matters of deportment, such as behavior on the street or in other public places. Are these things "not the teacher's business"? The girls do not suggest that, if they admire the teacher's womanliness and really desire to be like her. And the teacher who is missing motherhood for herself may well be grateful if she gains one of its privileges and becomes counselor to her girls.

But I do not purpose to discuss this matter of the education of our girls from the standpoint of sentiment but chiefly from an industrial point of view. Most of the girls in the city high schools are going out after four years or less to work by the day, six days a week, four weeks a month. Our American-born girls have left domestic work, which has a certain flexibility which makes an easy day possible for a woman when she needs it, and are working side by side with men in an inflexible industrial system which will go on every day, with the workers or over them. Employers of woman's labor know, in a general way at least, that they lose a great deal of time that they have paid for

because their employees are not able every day to do a day's work. Is it fair for the schools to send out women who are trained as typewriters and bookkeepers but who are physically unfit to meet the demands of business life? And they are still less fit for regular work which keeps them standing.

Is all this unfitness and suffering unavoidable? I believe not, if only each girl during the last of her grammar-school course and in the high school does her work according to her "rhythmic law;" if she takes her days of rest while she is developing as a woman and while she is in the comparative freedom of school life where such a rest is entirely compatible with satisfactory work.

I have by no means forgotten the pressure which lies all the time upon the public schools—how many things "must" be done, how every year makes new demands upon instructors. The teachers themselves are competent to decide which things are best worth doing.